

FUTURE DIRECTIONS FOR DCCPS

DECEMBER 6, 2022

cancercontrol.cancer.gov/overview-highlights/2022/

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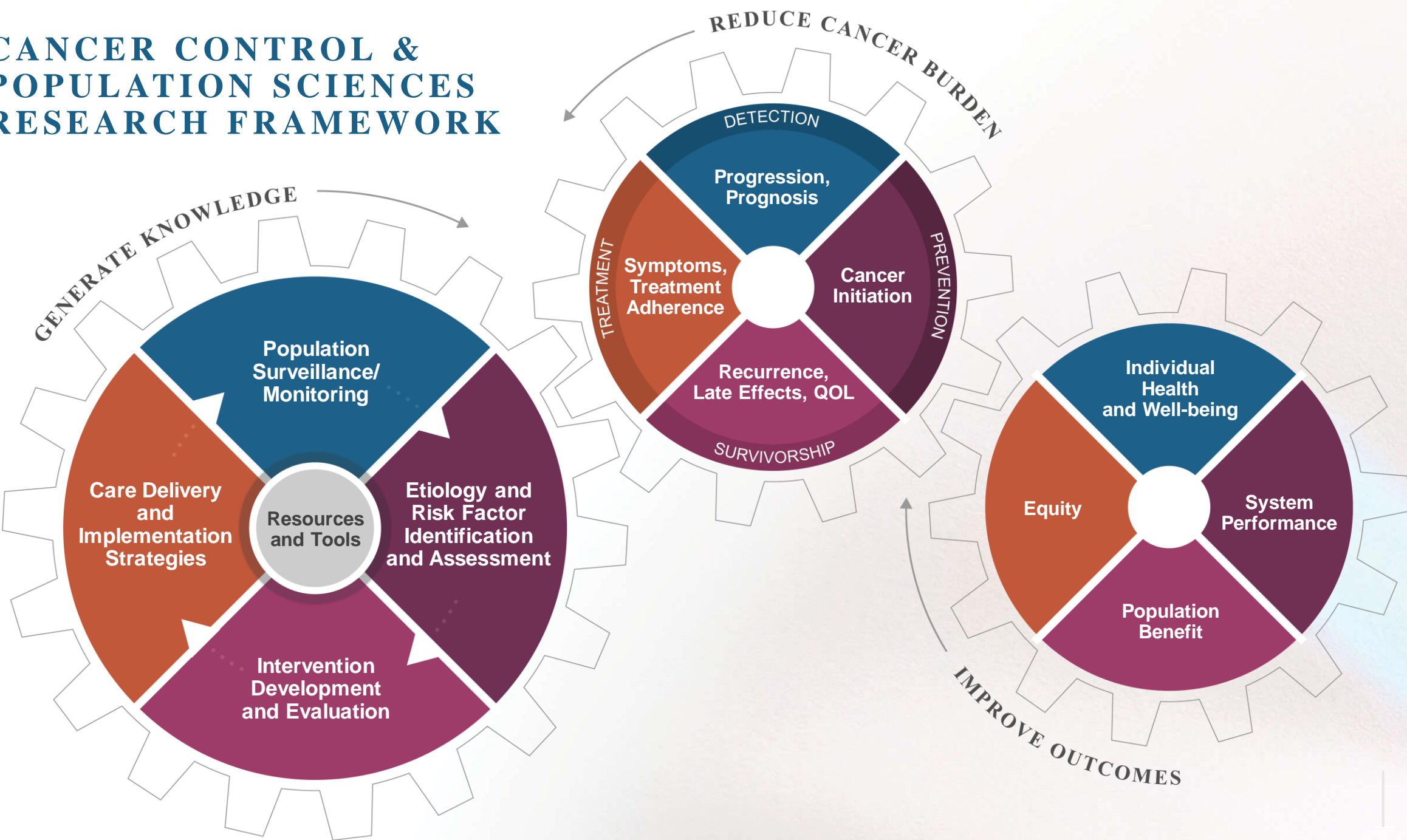
- What is cancer control?
- Cancer control research framework
- Current status of DCCPS
- Future opportunities in cancer control
- Summary

What is Cancer Control?

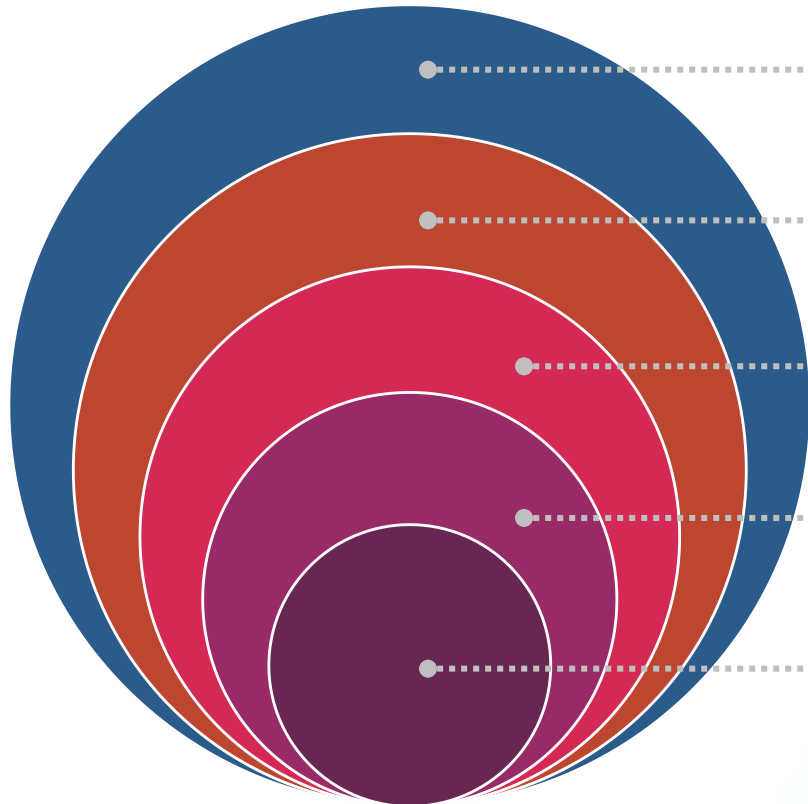
Cancer control prevents the headwind and aligns the current to reduce the burden of the cancer journey.



CANCER CONTROL & POPULATION SCIENCES RESEARCH FRAMEWORK



MULTILEVEL INTERVENTIONS



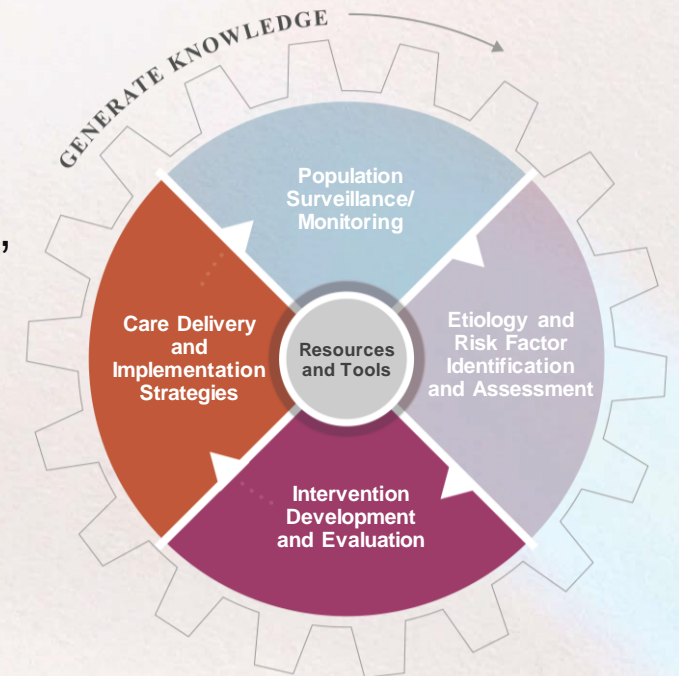
● **Societal:** policy, legislation, built environment, social support

● **Community:** culture, values, norms, engagement

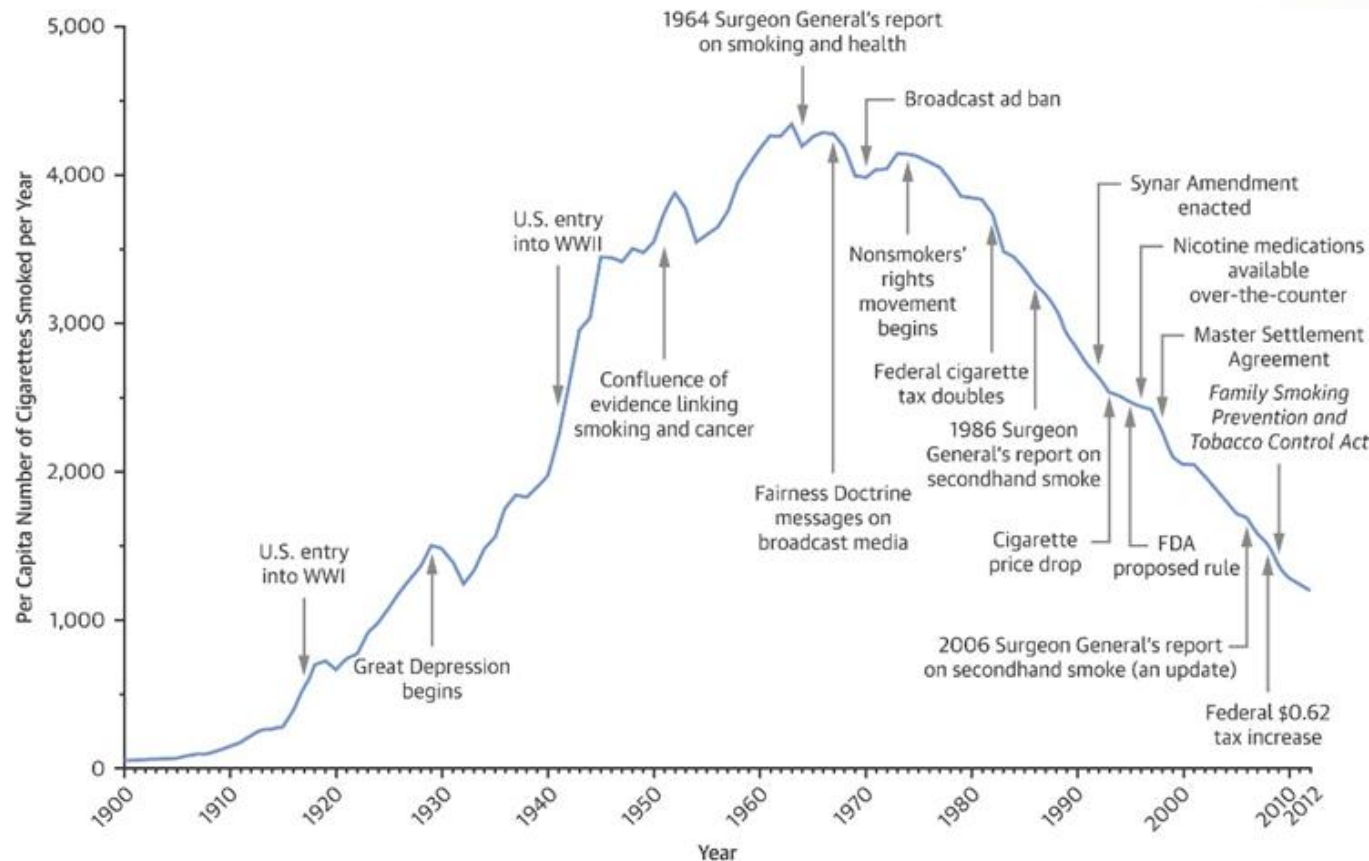
● **Organizational:** access, navigation, coordination, digital health

● **Interpersonal:** caregiver, family, social network

● **Individual:** knowledge, attitudes, skills, behaviors



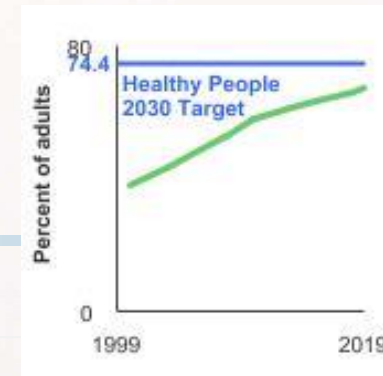
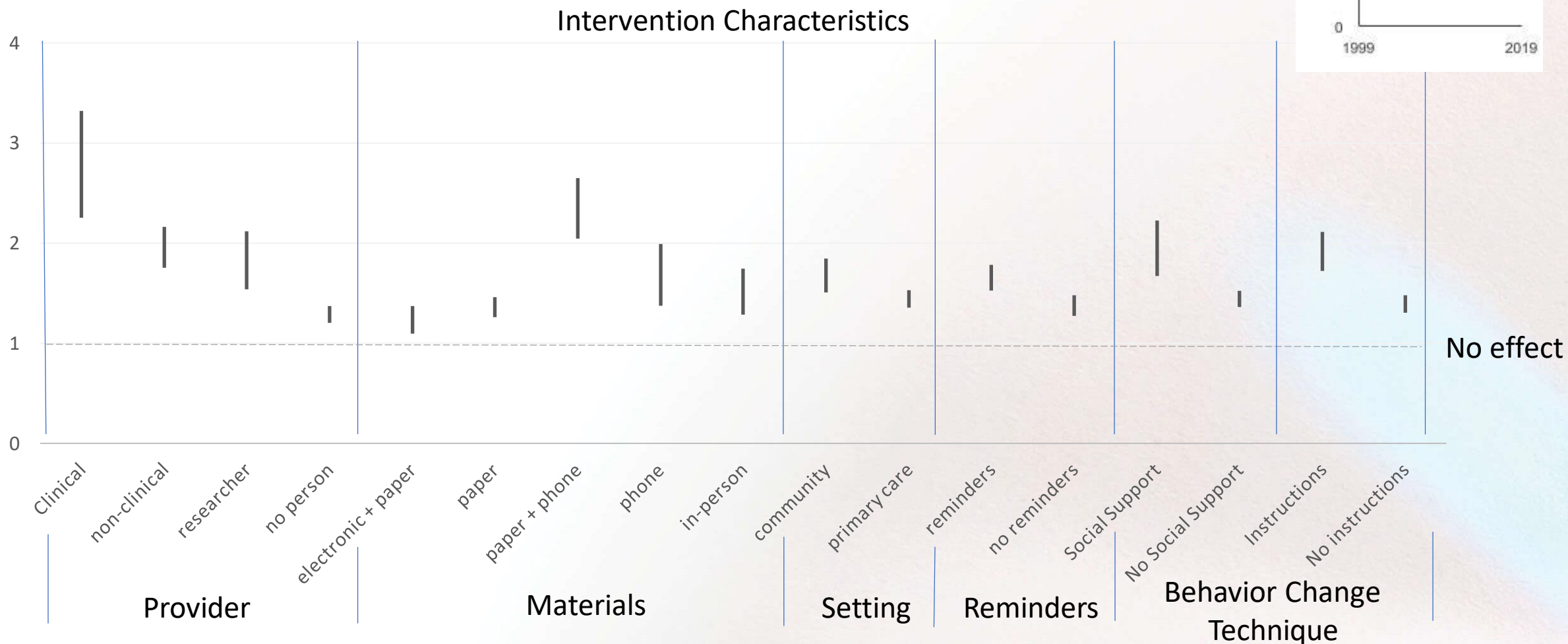
EXAMPLE #1: TOBACCO CONTROL



from the 2014 Surgeon General's Report,
*The Health Consequences of Smoking: 50
years of progress*

Adapted from Warner 1985 with permission from
Massachusetts Medical Society, ©1985; [U.S. Department of
Health and Human Services 1989](#); [Creek et al. 1994](#); U.S.
Department of Agriculture 2000; [U.S. Census Bureau
2013](#); [U.S. Department of the Treasury 2013](#).

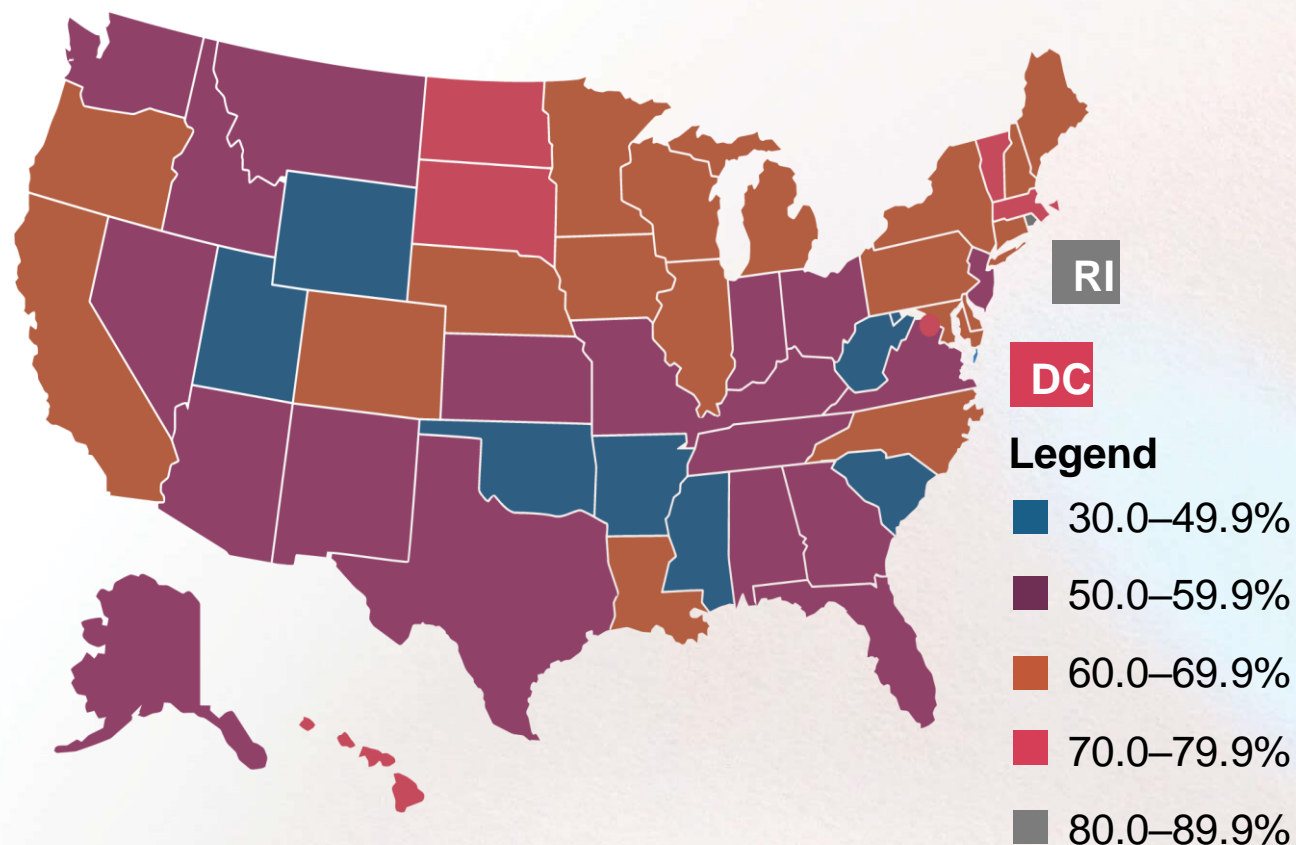
EXAMPLE #2: CRC SCREENING



Tsipa et al. *Health Psychology Review* 2021; 15(3):371-394

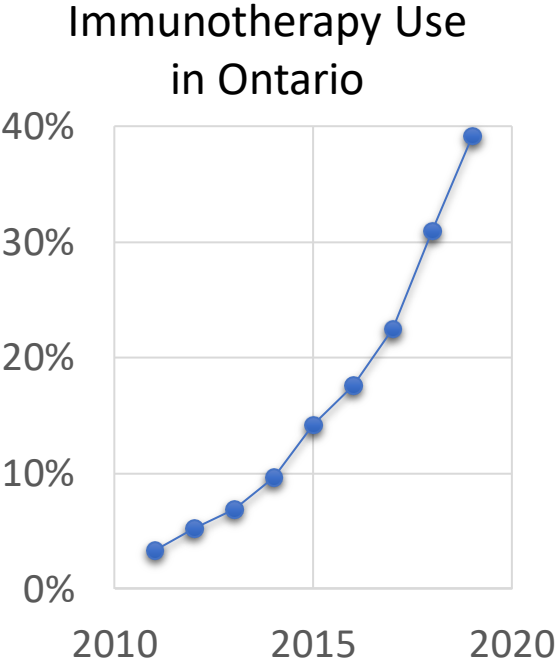
EXAMPLE #3: HPV VACCINATION

There is substantial variation across states in adolescent HPV vaccination rates, and only **one state** meets Healthy People 2030 Targets.

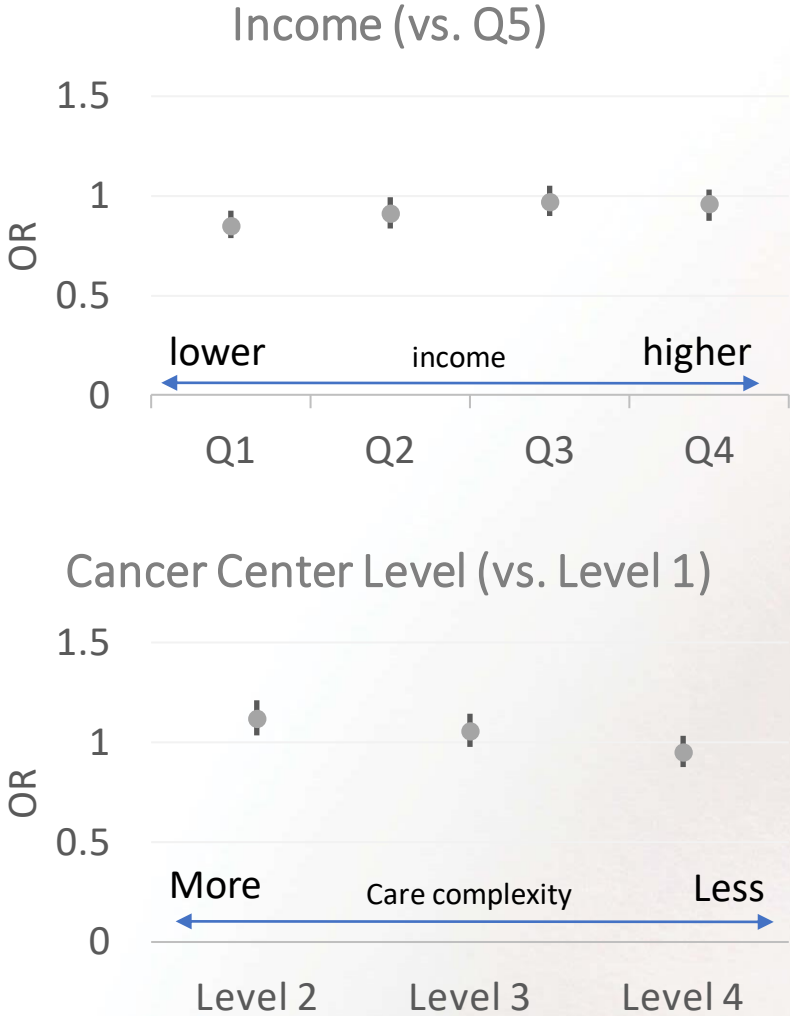


National Immunization Survey, 2020

EXAMPLE #4: IMMUNOTHERAPY



Raphael et al. *The Oncologist* 2022; 27:675-684



Immuno-oncology: a policy action framework

Creating enabling policies to provide patients with an innovative cancer treatment modality

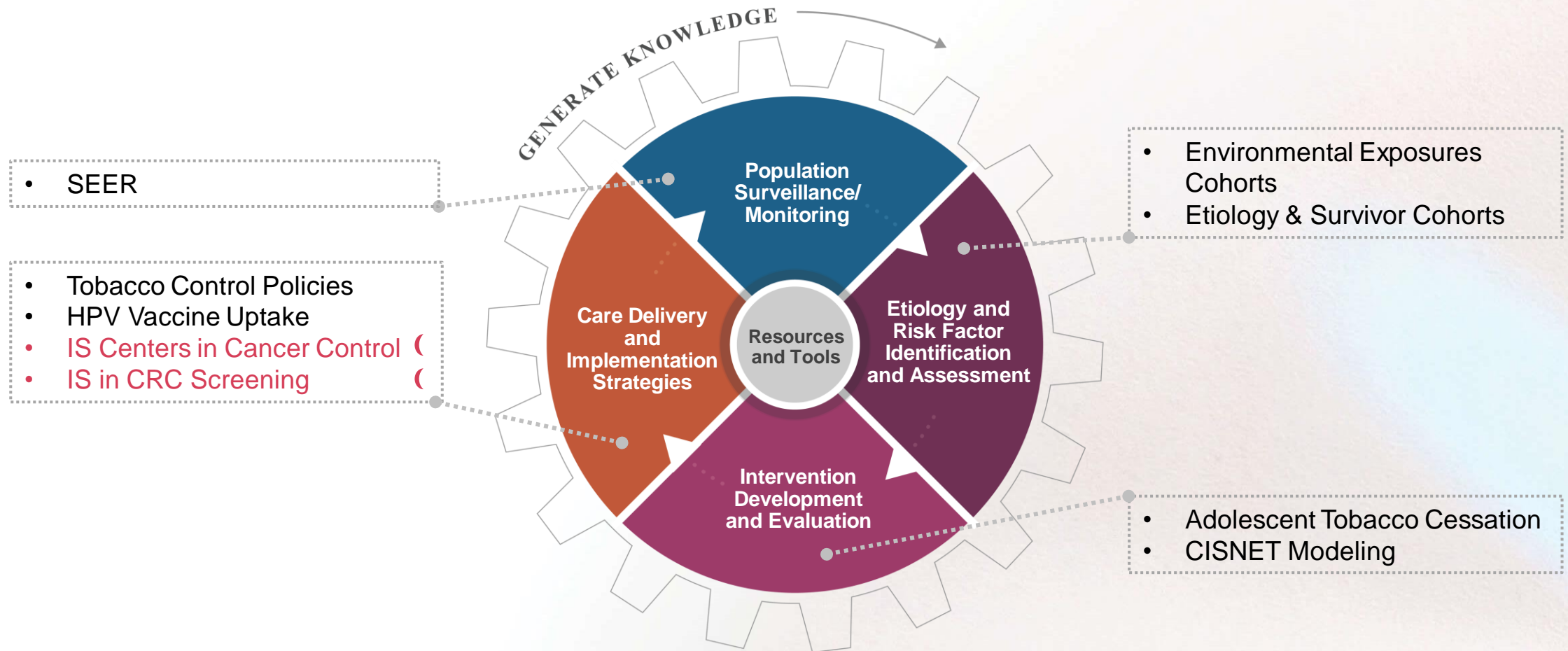
The European Expert Group on Immuno-Oncology*

*The European Expert Group on Immuno-Oncology is an independent network composed of Francesco de Lorenzo (European Cancer Patient Coalition (EPCPC)); Philippe de Backer, MEP; Cristian Silviu Busoi, MEP; Cedrik M. Britten (Association for Cancer Immunotherapy (ACIT)); Marc van den Bulcke (Institute of Public Health, Belgium); Szymon Chrostowski (Let's Win Health Foundation, Poland); Edith Frenoy, European Federation of Pharmaceutical Industries and Associations (EFPIA); Christoph Huber (CIMT); Burçak Karaca (Turkish Immuno-Oncology Society); James Larkin (Royal Marsden Hospital, UK); Cilla Linssen (Lung Cancer Europe (LUCE)); Olivier Michélin (European Society for Medical Oncology (ESMO)); Mihaila Mitranu (ECRC); Ingrid van den Noecker (European Cancer Organisation (ECCO)); Francisco Ventura Ramos (Portuguese Institute of Oncology, Lisbon)

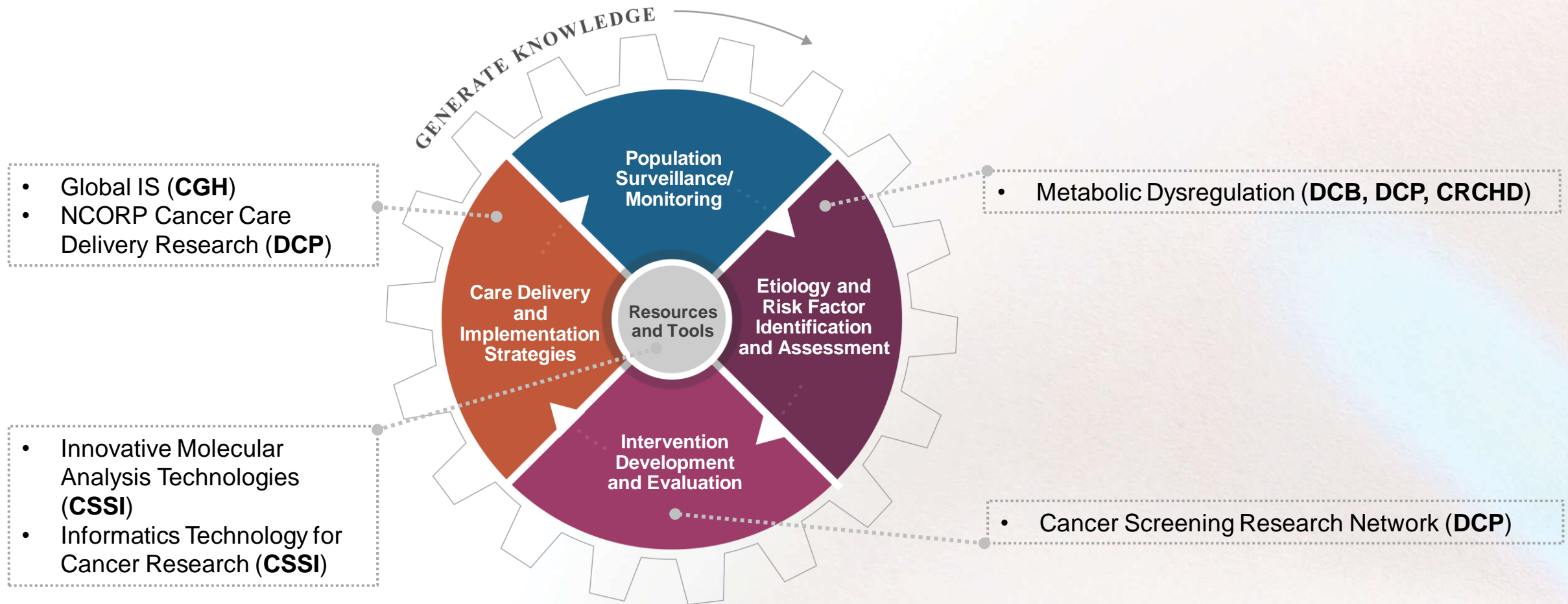
These expert recommendations have been collected and edited by SHW Health Ltd. with financial and organizational support from Bristol-Myers Squibb for meeting costs, layout and printing of this document. The sponsor provided comments on the document, however the content of the document reflects consensus from the members of the expert group who had full editorial control.

EXAMPLE DCCPS-LED INITIATIVES (RFAs & PARs)

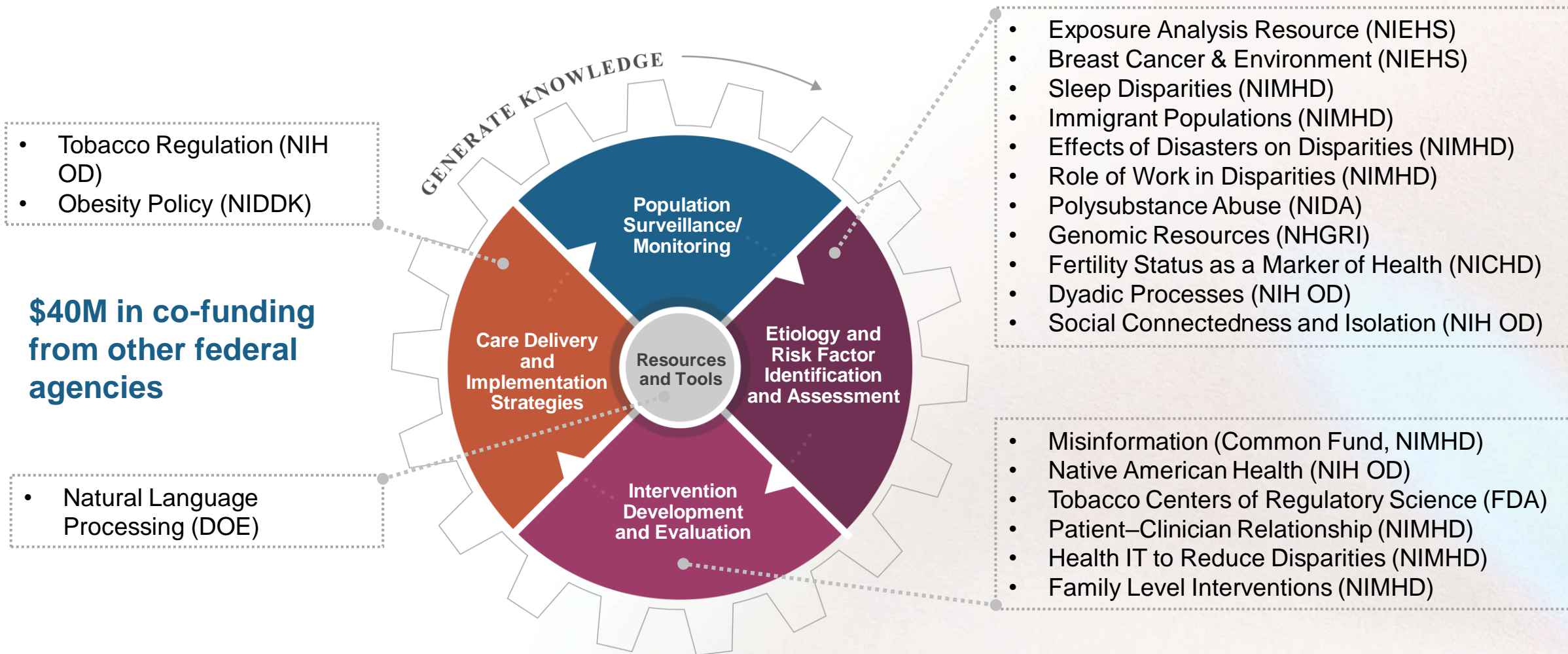
(of 33 ACTIVE INITIATIVES)



ACTIVE INITIATIVES WITH NCI PARTNERS

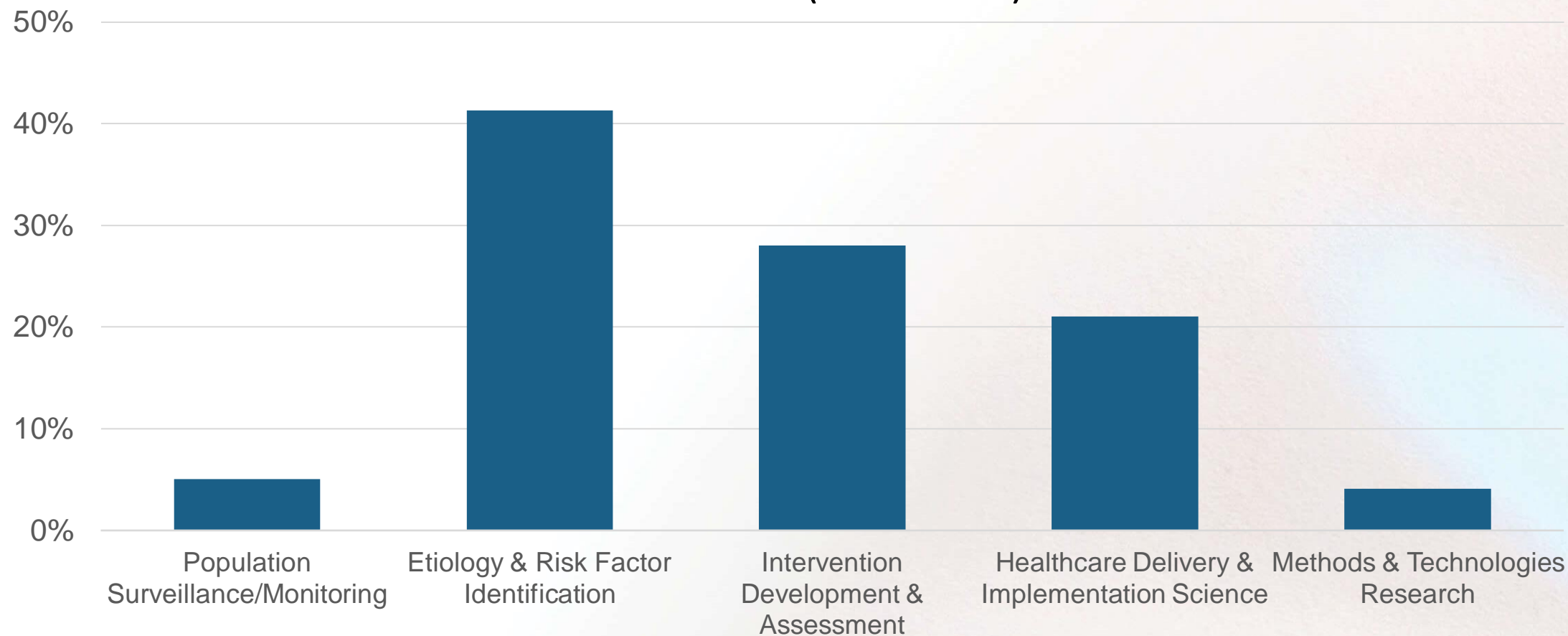


ACTIVE INITIATIVES WITH PARTNERS

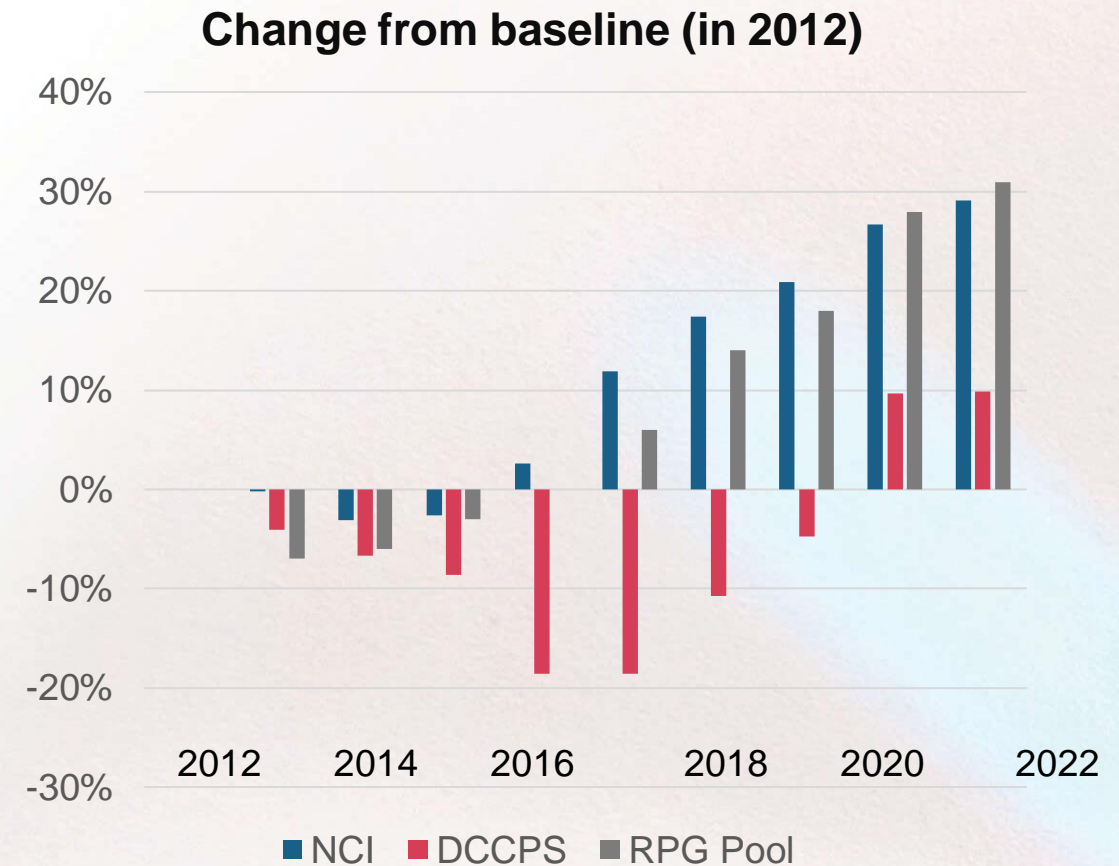
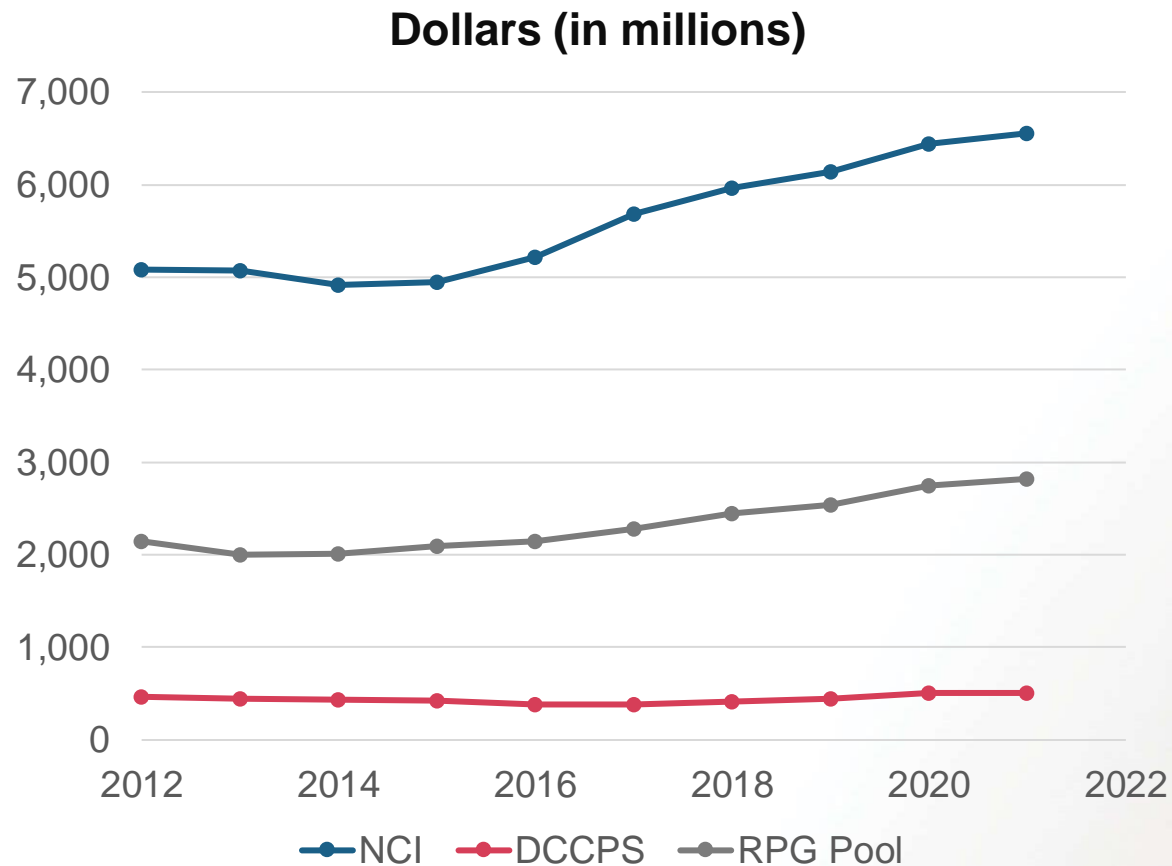


INVESTIGATOR-INITIATED R01/R37 PORTFOLIO

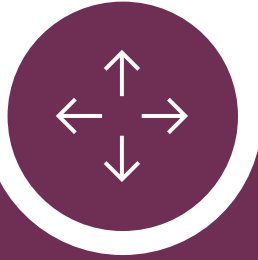
Active Awards (as of 2022)



NCI'S INVESTMENT IN CANCER CONTROL DOES NOT KEEP PACE WITH NCI'S BUDGET



FUTURE PRIORITIES



Adapt

Remain nimble and flexible to recognize and act on emerging opportunities and community input.



Build

Leverage the strong foundation achieved over the past 25 years.



Create

Enable bold and innovative possibilities that are currently infeasible or impractical.

KEY CROSS-CUTTING AREAS OF FOCUS



Health Equity



Data Strategies



Modifiable Risk Factors



Climate Change



Evidence-based Policy



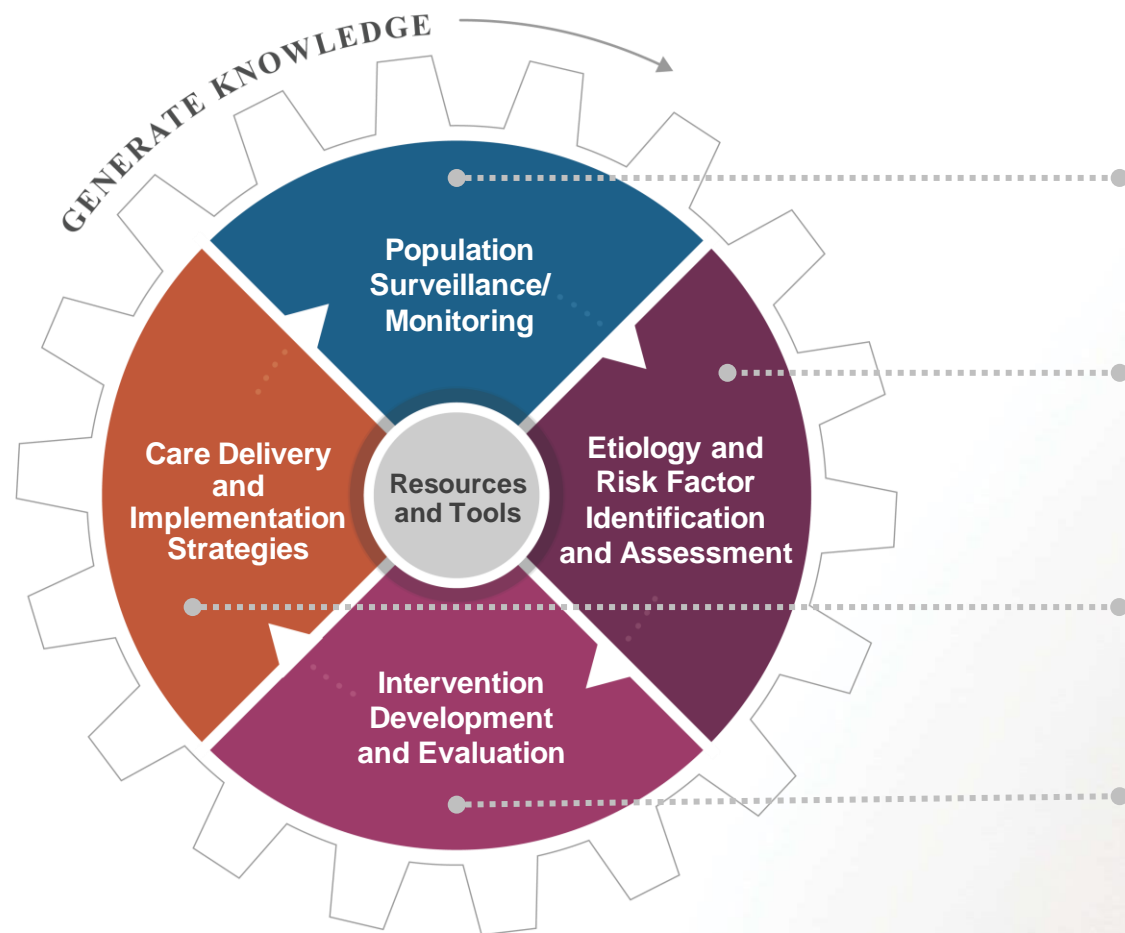
Digital Health

FOCUS AREA #1: HEALTH EQUITY

**ATTAINING THE
HIGHEST LEVEL OF
HEALTH FOR ALL
PEOPLE**



EQUITY REQUIRES INVESTMENT AT EVERY STEP



Include data elements that allow disaggregated reporting

Include diverse populations in cohorts

Address individual and structural barriers for diverse populations

Include precision and tailored approaches

FOCUS AREA #2: DATA GAPS IN CANCER CONTROL



Unstructured
EMR



Patient-reported
Information



Remote, Continuous
Monitoring



Social Determinants
of Health



Environmental
Exposures

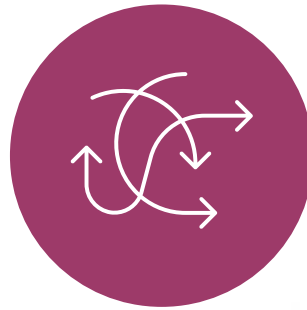
DATA STRATEGIES

Culture	Partnerships	Infrastructure	Standards and Harmonization	Innovation
<ul style="list-style-type: none">• Promote FAIR• Align incentives for researchers & communities to promote sharing	<ul style="list-style-type: none">• Regulatory authority outside of NCI/NIH• Common interests	<ul style="list-style-type: none">• Storage• Ease of use• Facilitate controlled access	<ul style="list-style-type: none">• Common data elements• Recommend data standards	<ul style="list-style-type: none">• Comprehensive data collection and linkages• High quality metadata and documentation

STRATEGIES TO ADVANCE RESEARCH ON MODIFIABLE RISK FACTORS



Identify novel risk factors where the least is known



Understand if improvements alter risk and survivorship trajectories



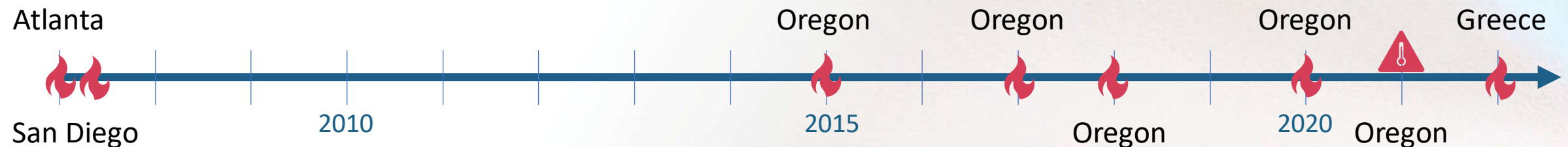
Identify effective interventions for subgroups, time periods, and contexts



Innovative solutions to meet Healthy People 2030 Targets

FOCUS AREA #4: CLIMATE CHANGE

- Climate change is the greatest health threat facing humanity.
- Climate disasters will be increasingly common and impactful.



EXPOSURE PATHWAYS FROM CLIMATE CHANGE



Air Quality

Wildfires increase particulate pollution, which causes about 15% of lung cancer deaths and impacts vulnerable cancer survivors.



Water Pollution

Fracking, flooding, wildfires, and oil & gas extraction contaminate the water supply with carcinogenic and persistent pollutants.



Sun and Heat Exposure

Ozone depletion and UV radiation exposure are worsened by climate change. Skin cancer incidence is increasing.



Food Quality

Food production yields are negatively impacted by climate change, reducing access to a protective diet for cancer risk and survivorship.

IMPACTS OF CLIMATE CHANGE EXPOSURES



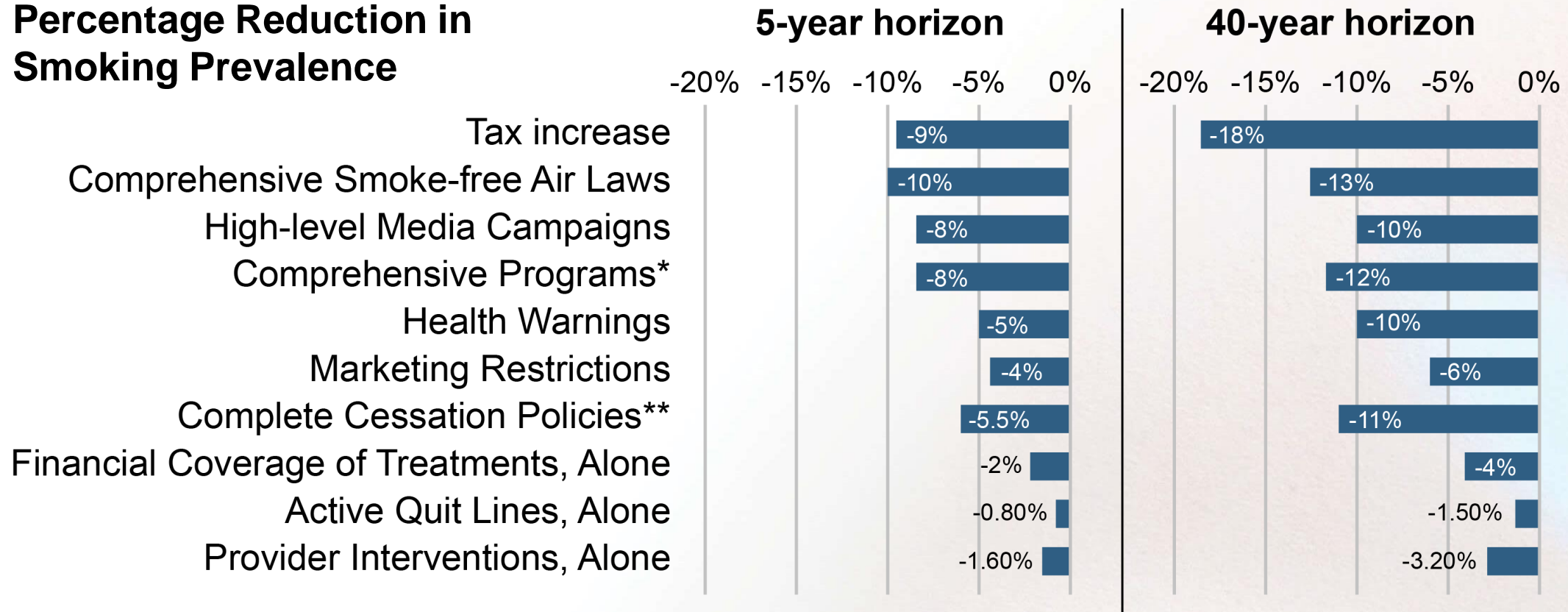
- Cancer patients exposed to Hurricane Katrina have worse long-term cancer survival.
- Lung cancer patients who experienced a hurricane disaster during radiation treatment had longer radiation treatment durations and significantly worse overall survival.

Bell et al. 2019; *J Gen Intern Med.* 35(1):390-2.

Nogueira et al. *JAMA.* 2019;322(3):269-271.

FOCUS AREA #5: POLICY RESEARCH

Percentage Reduction in Smoking Prevalence



*Comprehensive programs including media, other educational and cessation programs

**Complete cessation policies include financial coverage of treatments, quit lines, and health care provider interventions

Levy et al. *J Public Health Management & Practice*. 2018;24(5):448-457.

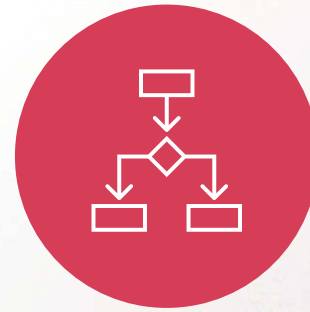
STRATEGIES TO ADVANCE POLICY RESEARCH



Develop novel
methods and
data sources



Training and
workforce
development



Inform and
evaluate the
impact of policies
on cancer control
outcomes



Identify and
work with
intermediaries
and partners

FOCUS AREA #6: DIGITAL HEALTH



Patient Safety



Quality of Care



Guideline Adherence



Clinician–Patient
Interaction

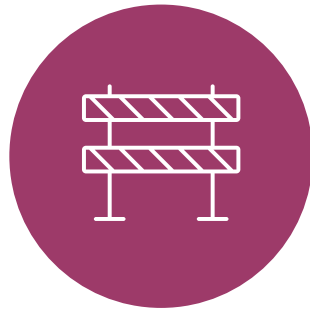


Patient Experience

STRATEGIES TO ADVANCE DIGITAL HEALTH



Training and
workforce
development



Investigate and
address barriers
to equity,
adoption, and
sustainment



Develop and
test new digital
health
technologies



Collaborate
and coordinate
with federal
partners

Population-based strategies with an equity lens are essential to realize the full potential of medical discoveries and innovations.



QUESTIONS?

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